L13	0	((card and adapt$r) and plastic and molded and ((one adj1 piece) or (integral)) and (contacts) and controller).clm.	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2008/05/08 15:08
L14	620	(smart and media and adapter) and (memory adj1 stick) and Flash and Compact and controller	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/05/08 15:08
L15	96	439/76.1 and (card adj1(reader or adapter))	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2008/05/08 15:09
L16	657	361/730.ccls.	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2008/05/08 15:09
L17	0	(jones adj1 larry adj1 laswon).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/08 15:10
L18	43	(jones adj1 larry adj1 lawson).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/05/08 15:10
L19	657	361/730.ccls.	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	OFF	2008/05/08 15:27
L20	8	((card and adapt$r) and mold$3 and (contacts) and controll $4).clm.	US-PGPUB; USPAT; EPO; DERWENT; IBM_TDB	OR	ON	2008/05/08 15:29

5/ 8/ 2008 3:29:49 PM
C:\ Documents and Settings\ Dlevi\ My Documents\ EAST\ workspaces\ 10064966smart universal flash media adapter.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11858086	MAMBAKKAM ET AL.
	Examiner	Art Unit
	DAMEON E LEVI	2841

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/08/2008								
	1	-								
	2	-								
	3	-								
	4	-								
	5	-								
	6	-								
	7	-								
	8	-								
	9	-								
	10	-								
	11	-								
	12	-								
	13	-								
	14	-								
	15	-								
	16	-								
	17	-								
	18	-								
	19	-								
1	20	=								
2	21	=								
3	22	=								
4	23	=								
5	24	=								
6	25	=								
7	26	=								
8	27	=								
9	28	=								
10	29	=								
11	30	=								
12	31	=								
13	32	=								
14	33	=								
15	34	=								
16	35	=								
17	36	=								

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11858086	MAMBAKKAM ET AL.
	Examiner	Art Unit
	DAMEON E LEVI	2841

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/08/2008								
18	37	=								
19	38	=								
20	39	=								
21	40	=								
22	41	=								
23	42	=								
24	43	=								
25	44	=								
26	45	=								
27	46	=								
28	47	=								
29	48	=								
30	49	=								

Issue Classification

Application/Control No.	Applicant(s)/Patent Under Reexamination
11858086	MAMBAKKAM ET AL.
Examiner	**Art Unit**
DAMEON E LEVI	2841

ORIGINAL		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
361	737	H	0	5	K	7 / 02 (2006.01.01)						

CROSS REFERENCE(S)					
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
439	945	946	638		
235	492				

/DAMEON E LEVI/ 05/08/2008 (Assistant Examiner) (Date)		**Total Claims Allowed:** 30
/Ishwar (I. B.) Patel/ 5/12/08 (Primary Examiner) (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 3 , 7A

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11858086	MAMBAKKAM ET AL.
	Examiner	Art Unit
	DAMEON E LEVI	2841

SEARCHED

Class	Subclass	Date	Examiner
361	737, 730, 736, 752	5/8/2008	DEL
439	945, 946, 638, 76.1	5/8/2008	DEL
235	492	5/8/2008	DEL

SEARCH NOTES

Search Notes	Date	Examiner
Please see EAST Search History printout attached	5/8/2008	DEL

INTERFERENCE SEARCH

Class	Subclass	Date	Examiner
	Please see Interference claim Search Query attached	5/8/2008	DEL

Application Number	Application No.	Applicant(s)	
	11/858,086	MAMBAKKAM ET AL.	
	Terminal Disclaimer Filed: 04/04/08		

TERMINAL DISCLAIMER	☒ APPROVED	☐ DISAPPROVED
Document Code - DISQ	This patent is subject to a Terminal Disclaimer	Reasons:
INTERNAL DOCUMENT – DO NOT MAIL		

U.S. Patent and Trademark Office

NOTE DISCLAIMER:

The term of this patent shall not extend beyond the expiration date of Pat. No. 7,295,443, , , .

☒ **SHARON S. HOPPE**
PARALEGAL SPECIALIST
TECHNOLOGY CENTER 2800

☐ **RENEE M. PRESTON**
PARALEGAL SPECIALIST
TECHNOLOGY CENTER 2800

☐ **TREDELLE D. JACKSON**
PARALEGAL SPECIALIST
TECHNOLOGY CENTER 2800

☐ **NOVA M. CHAPMAN**
PARALEGAL SPECIALIST
TECHNOLOGY CENTER 2800

☐ **CASSANDRA B. PARIS**
PARALEGAL SPECIALIST
TECHNOLOGY CENTER 2800

Doc code :IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-08)
Approved for use through 04/30/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	11858086
Filing Date	2007-09-19
First Named Inventor	Sreenath Mambakkam
Art Unit	2841
Examiner Name	Levi, Dameon E.
Attorney Docket Number	76706-200108

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6663007	B1	2003-12-16	Sun et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	11858086
	Filing Date	2007-09-19
	First Named Inventor	Sreenath Mambakkam
	Art Unit	2841
	Examiner Name	Levi, Dameon E.
	Attorney Docket Number	76706-200108

	1	Lexmark Service Manual, 5000 and 5700 Color Jetprinter; 5770 Photo Jetprinter, 4093/4094, October 2000, page 5-3	☐

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	11858086
Filing Date	2007-09-19
First Named Inventor	Sreenath Mambakkam
Art Unit	2841
Examiner Name	Levi, Dameon E.
Attorney Docket Number	76706-200108

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Edward P. Heller III, 29075/	Date (YYYY-MM-DD)	2008-04-04
Name/Print	Edward P. Heller III	Registration Number	29,075

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

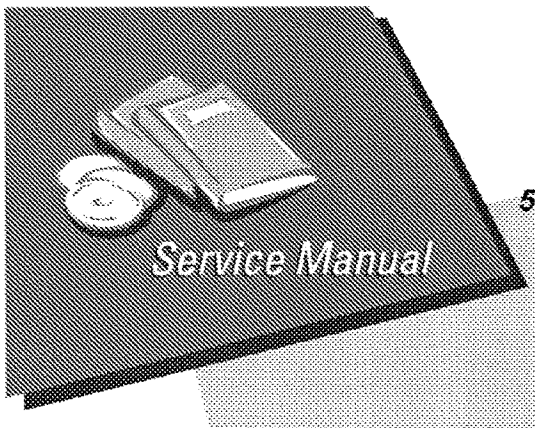
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



5000 and 5700 Color Jetprinter™
5770 Photo Jetprinter

4093/4094

- Table of Contents
- Start Diagnostics
- Safety and Notices
- Trademarks
- Index
- Manuals Menu

LEXMARK™

© Lexmark International, Inc.
All rights reserved.
UNITED STATES GOVERNMENT RESTRICTED RIGHTS
This software and documentation are provided with RESTRICTED RIGHTS. Use, duplication or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 and in similar clauses in the FAR and NASA FAR Supplement.

4093/4094

Edition: October 2000

The following paragraph does not apply to any country where such provisions are inconsistent with local law: LEXMARK INTERNATIONAL, INC. PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in later editions. Improvements or changes in the products or the programs described may be made at any time.

Comments may be addressed to Lexmark International, Inc., Department D22/035-3, 740 New Circle Road N.W., Lexington, Kentucky 40550, U.S.A. Lexmark may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you. You can purchase additional copies of publications related to this product by calling 1-800-553-9727. In other countries, contact your point of purchase.

Lexmark and Optra are trademarks of Lexmark International, Inc., registered in the United States and/or other countries.

Color Jetprinter is a trademark of Lexmark International, Inc.

Other trademarks are the property of their respective owners.

© Copyright Lexmark International, Inc. 1998, 2000
All rights reserved.

UNITED STATES GOVERNMENT RESTRICTED RIGHTS
This software and documentation are provided with RESTRICTED RIGHTS. Use, duplication or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 and in applicable FAR provisions. Lexmark International, Inc., Lexington, KY 40550.

Table of Contents

Preface ix

Safety Information x

General Information 1-1

Models 1-1
Lights and Buttons (5770) 1-2
Operator Panel and Menu (5770) 1-3
Resolution and Print Speed 1-5
Power Consumption 1-5
Maintenance Approach 1-5
Abbreviations 1-6

Diagnostic Information 2-1

Start 2-1
- Error Indicator Table 2-2
- Power-On Self Test (POST) Sequence 2-3
- Power-On Self Test (POST) Sequence (5770) 2-3
- POST Symptom Table 2-4
- Symptom Tables 2-5

Service Checks 2-8
- First Print Line Service Check 2-8
- Maintenance Station Service Check 2-9
- Operator Panel Service Check (5770) 2-10
- Operator Panel Display Service Check 2-11
- Paper Feed Service Check 2-12
- Paper Path Service Check 2-14
- Parallel Port Service Check 2-14
- Photo Controller Service Check 2-15
- Power Service Check 2-16
- Print Quality Service Check 2-17
- Transport Service Check 2-19

Diagnostic Aids 3-1

Paper Pick Assembly Operation 3-1
End of Forms (EOF)Test 3-5
Test Page 3-6

Repair Information 4-1

Handling ESD-Sensitive Parts 4-1
Adjustments 4-2

Removal Procedures 4-2
Releasing Plastic Latches 4-2
Base Assembly Removal 4-3
Carrier Belt Removal 4-3
Carrier Frame Assembly Removal 4-4
Carrier Transport Motor Removal 4-4
Covers (Complete) Removal 4-5
Cover (Center) Removal 4-6
Encoder Card Removal 4-6
Encoder Strip Removal 4-7
EOF Flag Assembly and Holder Removal 4-7
Exit Drive Belt Removal 4-8
Exit Roller Removal 4-8
Gear Plate Removal 4-9
Gutter Pad Removal 4-9
Large Feed Roll Removal 4-9
Maintenance Station Assembly Removal 4-10
Maintenance Wipers and Caps Removal 4-10
Mid-Frame Assembly Removal 4-10
Paper Feed Motor Removal 4-11
Paper Pick Assembly Removal 4-11
Photo Controller Assembly Removal 4-11
Printhead Cable and Cradle Removal 4-12
Printhead Carrier Assembly Removal 4-13
Printhead Rubber Backer Removal 4-14
Sheet Feeder Removal 4-15
Small Feed Roller Removal 4-15
Star Roller Removal 4-15
System Board Removal 4-15

Connector Locations 5-1

System Board Connectors (5000, 5700) 5-1
System Board Connectors (5770) 5-2
Photo Controller Board Connectors (5770) 5-3

Preventive Maintenance 6-1

Lubrication Specifications 6-1

Parts Catalog 7-1
How To Use The Parts Catalog 7-1
Covers 7-2
Frames 7-4
Paper Feed 7-6
Electronics 7-8
Carrier 7-10
Carrier Transport 7-12
Sheet Feeder 7-14
Maintenance Station 7-16
Photo Controller 7-18
Index X-1

Preface

This manual is divided into the following chapters:

1. **General Information** contains a general description of the printer and the maintenance approach used to repair it. Special tools and test equipment are listed in this chapter, as well as general environmental and safety instructions.
2. **Diagnostic Information** contains an error indicator table, symptom tables, and service checks used to isolate failing field replaceable units (FRUs).
3. **Diagnostic Aids** contains tests and checks used to locate or repeat symptoms of printer problems.
4. **Repair Information** provides instructions for making printer adjustments and removing and installing FRUs.
5. **Connector Locations** uses illustrations to identify the connector locations and test points on the printer.
6. **Preventive Maintenance** contains the lubrication specifications and recommendations to prevent problems.
7. **Parts Catalog** contains illustrations and part numbers for individual FRUs.

Safety Information

- This product is designed, tested and approved to meet strict global safety standards with the use of specific Lexmark components. The safety features of some parts may not always be obvious. Lexmark is not responsible for the use of other replacement parts.
- The maintenance information for this product has been prepared for use by a professional service person and is not intended to be used by others.
- There may be an increased risk of electric shock and personal injury during disassembly and servicing of this product. Professional service personnel should understand this and take necessary precautions.

Consignes de Sécurité

- Ce produit a été conçu, testé et approuvé pour respecter les normes strictes de sécurité globale lors de l'utilisation de composants Lexmark spécifiques. Les caractéristiques de sécurité de certains éléments ne sont pas toujours évidentes. Lexmark ne peut être tenu responsable de l'utilisation d'autres pièces de rechange.
- Les consignes d'entretien et de réparation de ce produit s'adressent uniquement à un personnel de maintenance qualifié.
- Le démontage et l'entretien de ce produit pouvant présenter certains risques électriques, le personnel d'entretien qualifié devra prendre toutes les précautions nécessaires.

Norme di sicurezza

- Il prodotto è stato progettato, testato e approvato in conformità a severi standard di sicurezza e per l'utilizzo con componenti Lexmark specifici. Le caratteristiche di sicurezza di alcune parti non sempre sono di immediata comprensione. Lexmark non è responsabile per l'utilizzo di parti di ricambio di altri produttori.
- Le informazioni riguardanti la manutenzione di questo prodotto sono indirizzate soltanto al personale di assistenza autorizzato.
- Durante lo smontaggio e la manutenzione di questo prodotto, il rischio di subire scosse elettriche e danni alla persona è più elevato. Il personale di assistenza autorizzato, deve, quindi, adottare le precauzioni necessarie.

Sicherheitshinweise

- Dieses Produkt und die zugehörigen Komponenten wurden entworfen und getestet, um beim Einsatz die weltweit gültigen Sicherheitsanforderungen zu erfüllen. Die sicherheitsrelevanten Funktionen der Bauteile und Optionen sind nicht immer offensichtlich. Sofern Teile eingesetzt werden, die nicht von Lexmark sind, wird von Lexmark keinerlei Verantwortung oder Haftung für dieses Produkt übernommen.
- Die Wartungsinformationen für dieses Produkt sind ausschließlich für die Verwendung durch einen Wartungsfachmann bestimmt.
- Während des Auseinandernehmens und der Wartung des Geräts besteht ein zusätzliches Risiko eines elektrischen Schlags und körperlicher Verletzung. Das zuständige Fachpersonal sollte entsprechende Vorsichtsmaßnahmen treffen.

Pautas de Seguridad

- Este producto se ha diseñado, verificado y aprobado para cumplir los más estrictos estándares de seguridad global usando los componentes especificos de Lexmark. Puede que las características de seguridad de algunas piezas no sean siempre evidentes. Lexmark no se hace responsable del uso de otras piezas de recambio.
- La información sobre el mantenimiento de este producto está dirigida exclusivamente al personal cualificado de mantenimiento.
- Existe mayor riesgo de descarga eléctrica y de daños personales durante el desmontaje y la reparación de la máquina. El personal cualificado debe ser consciente de este peligro y tomar las precauciones necesarias.

Informações de Segurança

- Este produto foi concebido, testado e aprovado para satisfazer os padrões globais de segurança na utilização de componentes específicos da Lexmark. As funções de segurança de alguns dos componentes podem não ser sempre óbvias. A Lexmark não é responsável pela utilização de outros componentes de substituição.
- As informações de segurança relativas a este produto destinam-se a profissionais destes serviços e não devem ser utilizadas por outras pessoas.
- Risco de choques eléctricos e ferimentos graves durante a desmontagem e manutenção deste produto. Os profissionais destes serviços devem estar avisados deste facto e tomar os cuidados necessários.

Informació de Seguretat

- Aquest producte està dissenyat, comprovat i aprovat per tal d'acomplir les estrictes normes de seguretat globals amb la utilització de components específics de Lexmark. Les característiques de seguretat d'algunes peces pot ser que no sempre siguin òbvies. Lexmark no es responsabilitza de l'ús d'altres peces de recanvi.
- La informació pel manteniment d'aquest producte està orientada exclusivament a professionals i no està destinada a ningú que no ho sigui.
- El risc de xoc elèctric i de danys personals pot augmentar durant el procés de desmuntatge i de servei d'aquest producte. El personal professional ha d'estar-ne assabentat i prendre les mesures convenients.

安全资讯

- 本产品使用特有的 Lexmark 元件，并依照严格的世界安全标准来设计、测试及验证。有些零件的安全功能可能不明显。对於其他厂牌更换零件的使用，Lexmark 概不负责。
- 本产品的维护资讯仅供专业服务人员使用，而非针对一般使用者。
- 本产品在拆卸、维修的时候，遭受电击或人员受伤的危险性会增高，专业服务人员对这点必须有所了解，并采取必要的预防措施。

안전 사항

- 본 제품은 특정 Lexmark 구성 요소의 사용에 있어 엄격한 세계 안전 표준에 맞도록 설계, 테스트되었으며 승인받았습니다. 일부 부품의 안전성은 항상 보장되지 않습니다. Lexmark는 다른 교체 부품의 사용에 대한 책임을 지지 않습니다.
- 본 제품에 관한 유지 보수 설명서는 전문 서비스 기술자용으로 작성된 것이므로 비 전문가는 사용할 수 없습니다.
- 본 제품을 해체하거나 정비할 경우 전기적인 충격을 받거나 상처를 입을 위험이 커집니다. 전문 서비스 기술자는 이 사실을 숙지하고 필요한 예방 조치를 취하도록 하십시오.

1. General Information

The Lexmark 5000 Color Jetprinter™ and Lexmark 5700 Color Jetprinter are personal, near laser-quality inkjet printers. The print cartridge contains single-unit customer-replaceable supply items. Dual printheads provide color and true black printing without changing printheads. The black cartridge has a total of 208 nozzles and the photo cartridge has a total of 192 nozzles. Either the black or the photo cartridge is installed on the right. The color cartridge has a total of 192 nozzles and installs on the left. The printer is capable of printing in two directions.

The Lexmark Photo Jetprinter 5770 printer is a general purpose printer that provides high quality text and photos. The 5770 can be used without a computer to print photos or connected to a computer. When connected to a computer the printer performs the same as a 5700.

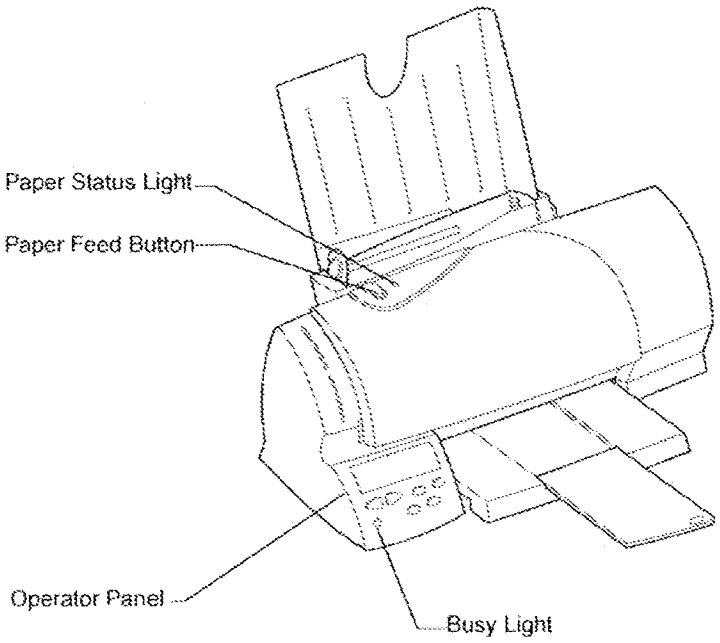
Models

5000	5700	5770
4094 - (S01, S02)	4093 - (S01, S02)	4093 - (S04)

Lights and Buttons (5770)

The printer has two sets of lights and buttons:

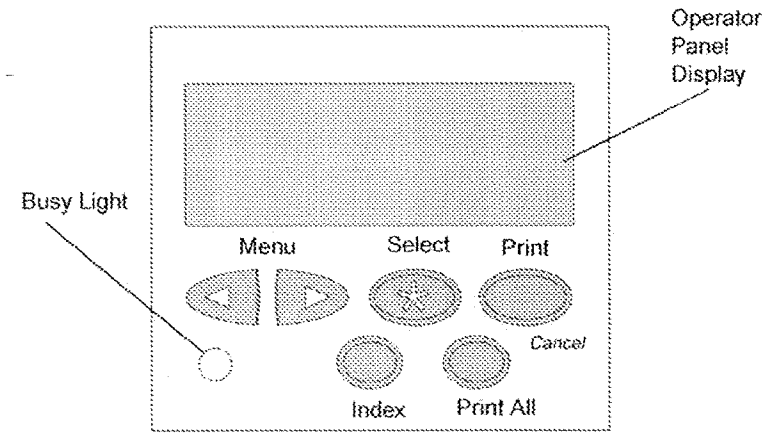
- One set is located at the bottom left-hand corner of the printer, on the operator panel.
- The other set is located at the top of the printer and includes the Paper Status light and Paper Feed button.



Operator Panel and Menu (5770)

Using the Operator Panel

The operator panel, on the front left side of the printer, has a 2-line by 16-character liquid crystal display (LCD), five buttons and one indicator light.

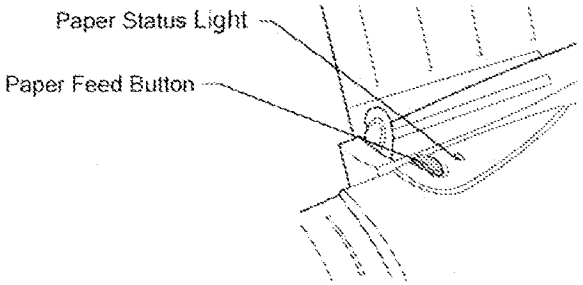


Operator Panel Busy Light

Light State	Meaning
On	A camera card is installed and the printer is ready to print.
Off	A camera card is not installed.
Blinking	The printer is busy.

Operator Panel Buttons

Button	Function
Menu	Used to scroll through the Menus.
Select	Used to select menu item - An asterisk (*) indicates an item is selected.
Print	Used to print a photo - Press and hold this button to cancel print when the light is blinking.
Index	Used to print an index page containing small images of all photos on the camera card.
Print All	Used to print all photos on the camera card.



Paper Status Light (All Models)

Light State	Meaning
Off	Ready to print.
On Solid	Printing or feeding media through the printer.
Blinking	Out of paper or printer error

Paper Feed Button (All Models)

Clears a paper jam or loads paper when there is a paper out condition.

Resolution and Print Speed

Color	Black
600 X 300 Draft 600 X 600 Letter Quality 1200 X 1200 Ultra High Quality	600 X 300 Draft 600 X 600 Letter Quality 1200 X 1200 Ultra High Quality
3 page/minute Draft	8 page/minute Draft

Power Consumption

- Less than 10 Watts - power off and power to the printer
- Less than 10 Watts - Idle Mode (power on - not printing)
- Less than 15 Watts - Printing (average)
- Less than 25 Watts - Printing (peak)

Maintenance Approach

The diagnostic information in this manual leads you to the correct field replaceable unit (FRU) or part. Use the error indicator charts, symptom index, service checks, and diagnostic aids to determine the symptom and repair the failure. Begin with "Start" on page 2-1.

This printer can be serviced without being connected to a host computer. The user is directed, in the Printer Control program, to perform the head to head and bidirectional alignment adjustments after replacing a print cartridge.

After you complete the repair, perform tests as needed to verify the repair.

Abbreviations

CSU	Customer Setup
EOF	End of Forms
ESD	Electrostatic Discharge
FRU	Field Replaceable Unit
HV	High Voltage
LED	Light-Emitting Diode
LV	Low Voltage
NVRAM	Nonvolatile Random Access Memory
OEM	Original Equipment Manufacturer
POST	Power-On Self Test
V ac	Volts alternating current
V dc	Volts direct current

2. Diagnostic Information

Use the error indicator table, symptom tables, service checks, and diagnostic aids to determine the failing part.

Start

Service error indications show as a series of flashes of the Paper Status light. There is a pause between each series of flashes. If your printer has an error indication, locate the series of flashes in the "Error Indicator Table" on page 2-2 and take the indicated action. Unplug the printer to clear the error indicator.

If an error indicator appears, go to the error indicator table and take the indicated action for that error. Run the "Test Page" on page 3-6. If no error appears, go to "Power-On Self Test (POST) Sequence" on page 2-3.

Error Indicator Table

Paper Status Light Flashes	Error Code	Action
2	81	Go to the "Transport Service Check" on page 2-18.
3	93	Replace the system board.
4	89	Go to the "Transport Service Check" on page 2-18.
5	90	Check the carrier for obstruction or binds. If no obstruction or bind, replace the system board.
6, 7	64-78	Replace the system board.
8	83	Replace the system board.
9, 10	79	Replace the system board.
12	92	Replace the printhead. If problem remains, replace the printhead cable.
14	95	The printer has received an invalid resolution setting from the user's application. Change the resolution in the application and turn the printer off and on to reset the condition. Refer to "Resolution and Print Speed" on page 1-5.

Power-On Self Test (POST) Sequence

Plug the printer in and check for a correct POST operation by observing the following:

1. The Paper Status light comes on and goes off.
2. The carrier moves over the maintenance station and seals the printheads.
3. The paper feed gears turn.
4. All motors stop.

If your printer completes POST with no errors, go to the "Symptom Tables," on page 2-5, locate the symptom and take the indicated action.

If your printer does not complete POST, locate the symptom in the following table and take the indicated action.

Power-On Self Test (POST) Sequence (5770)

Plug the printer in and check for a correct post operation by observing the following:

1. The Paper Status light comes on and goes off.
2. The operator panel Busy light comes on and then goes off.
3. The operator panel displays two rows of diamonds.
4. The carrier moves over the maintenance station and seals the printheads.
5. The paper feed gears turn.
6. All motors stop, and **Ready** appears in the display.

POST Symptom Table

Symptom	Action
No motors run	Go to the "Power Service Check" on page 2-15.
Paper feed gears do not turn	Go to the "Paper Feed Service Check" on page 2-11.
Carrier does not move	Go to the "Transport Service Check" on page 2-18.
Carrier slams side frame	Go to the "Transport Service Check" on page 2-18.
No Paper Status light	Replace the system board.
Blank Display (5770)	Go to the "Operator Panel Display Service Check (5770)" on page 2-10.
All Diamonds displayed after POST (5770)	Go to the "Operator Panel Display Service Check (5770)" on page 2-10
Display difficult to read (5770)	Go to the "Operator Panel Display Service Check (5770)" on page 2-10.
Display OK, Buttons do not function (5770)	Go to the "Operator Panel Button Service Check (5770)" on page 2-10.
One or more buttons do not function (5770)	Go to the "Operator Panel Button Service Check (5770)" on page 2-10.

Symptom Tables

Locate the symptom in the following tables and take the appropriate action.

Carrier Transport Problems

Symptom	Action
• No carrier movement • Slow carrier movement • Carrier stops • Carrier slams side frame	Go to the "Transport Service Check" on page 2-18.

Communications Problems

Symptom	Action
Printer not communicating with host computer (All models except 5770	Check the parallel port connection (connector J7). If the connection is good, replace the system board
5770	Go to the "Parallel Port Service Check (5770)" on page 2-13.

Maintenance Station Problems

Symptom	Action
• Fails to cap the printhead • Fails to clean the printhead	Go to the "Maintenance Station Service Check" on page 2-9.

Paper Feed Button and Paper Status Light Problems

Symptom	Action
Paper Feed button does not operate	Replace the system board.
Paper Status light does not come on	Replace the system board.

Photo Controller Problems (5770)

Symptom	Action
Prints from a PC but does not print from a flash card. Prints from a Flash Card but does not print from a PC.	Go to the "Photo Controller Service Check (5770)" on page 2-14.

Paper Feed Problems

Symptom	Action
Paper fails to stop at first print line	Go to the "First Print Line Service Check" on page 2-8.
• Fails to pick paper • Picks more than one sheet of paper • Picks paper but fails to feed • Paper jams • Paper fails to exit • Noisy paper feed	Go to the "Paper Feed Service Check" on page 2-11.
Paper skews	Go to the "Paper Path Service Check" on page 2-13.

Power Problems

Symptom	Action
No power in printer	Go to the "Power Service Check" on page 2-15.

Print Quality Problems

Symptom	Action
• Voids in characters • Light print • Prints off the page • Fuzzy print • Carrier moves but does not print • Printhead drying prematurely • Vertical alignment off • Excessive ink flow (Flooding) • Horizontal banding	Go to the "Print Quality Service Check" on page 2-13.
• Ink smearing • Vertical streaks on paper • Print lines crowded	Go to the "Paper Feed Service Check" on page 2-11.

Service Checks

First Print Line Service Check

	FRU	Action
1	End-of-Forms Flag	Check the flag for binds or damage.
2	End-of-Forms Sensor	Check the sensor for dirt.
3	System Board	Perform the "End of Forms (EOF) Test" on page 3-6 to check the end-of-forms sensor on the system board.
4	Paper Pick Assembly	Check the paper pick assembly for binds, wear, or damage.

Maintenance Station Service Check

The maintenance station has two functions:

1. Cleans the printhead nozzles during the print operation.
2. Seals the printhead when it is not being used to prevent the nozzles from drying.

	FRU	Action
1	Maintenance Station Assembly	As the carrier moves to the right over the maintenance station, a slot on the bottom of the carrier engages a tab on the sled of the maintenance station causing the caps to rise and seal the printheads. Carrier movement to the left will uncap the printheads. The wipers clean the printhead nozzles as the carrier leaves the maintenance station. The wipers clean the printheads only when the carrier is moving to the left. There should be no wiping action of the printhead nozzles when the carrier is moving to the right. After the cleaning operation is complete, a tab on the maintenance station engages a tab on the carrier, causing the wipers to lower. Check the maintenance station for worn or broken parts.
2	Wiper	A worn wiper causes degraded print quality just after a maintenance cleaning. Check for loose or worn wiper.
3	Cap	A worn cap causes the printhead nozzles to dry and clog. Check for loose or worn cap.

Operator Panel Button Service Check (5770)

	FRU / Function	Action
1	Operator Panel Cable Photo Controller Board	If the operator panel display is OK, but the buttons do not function, check the operator panel cable for continuity and replace the cable if necessary. If the symptom remains, replace the photo controller board.
2	Operator Panel Assembly	Run the "Button Test (5770)" on page 3-2. If any of the buttons fail, replace the operator panel assembly.
3	Operator Panel Assembly Photo Controller Board System Board to Photo Controller Board Cable System Board	Check all cables for proper connection. With power applied to the printer, disconnect JP1 from the photo controller board. Check for +5 V dc at JP1-2 on the controller board. If correct, replace the operator panel assembly. If incorrect, check for +5 V dc at pins P1-28 and P1-29. If voltage is correct, replace the photo controller board. If incorrect, check for +5 V dc at pins J9-28 and J9-29 on the system board. If correct, replace the system board to photo controller board cable. If the voltage at J9 is incorrect, replace the system board.

Operator Panel Display Service Check (5770)

	FRU / Function	Action
1	Operator Panel Assembly Operator Panel Cable Photo Controller Board System Board to Photo Controller Board Cable	If the operator panel is blank and the printer completes POST, voltage is not getting to the operator panel. Trace the +5 V dc line to the operator panel and replace the failing part. Trace +5 V dc at pins JP1-2, P1-28 and P1-29 on the photo controller board and pins J9-28 and J9-29 on the system board. If all diamonds are displayed after the printer completes POST, check the operator panel cable for continuity and replace the cable if necessary. If the symptom remains, replace the photo controller board. Run the "LCD Test (5770)," on page 3-2. If the test does not show all PELS, replace the operator panel assembly.

Paper Feed Service Check

If your printer does not have paper jams, continue with the service check. If your printer does have a paper jam problem, examine it for the following before you begin the service check:

- Check the entire paper path for obstructions.
- Be sure there is not too much paper in the sheet feeder.
- Be sure the correct type of paper is being used.
- Check for static in the paper.

	FRU	Action
1	System Board	With (J6) disconnected and power on, check for +30 V dc between (J6-1) and ground, on the system board. If the voltage is not present, check for motor pins shorted to the motor housing. If you find a shorted pin, replace the motor. If you still have a failure after replacing the motor, replace the system board.

	FRU	Action
2	Paper Feed Motor	A noisy or chattering motor or a motor that fails to turn, can be caused by: • An open or short in the motor • An open or short in the motor driver on the system board • A bind in the paper feed mechanism With the paper feed motor cable disconnected from the system board, check for 5 to 10 ohms between pin 1 and 4 on the motor cable. If the reading is incorrect, replace the motor. Check for motor pins shorted to the motor housing. If you find a shorted pin, replace the motor. If the failure remains, replace the system board. Although the paper feeds in a forward direction only, the paper feed motor turns in two directions. If the paper feed motor turns in one direction only, replace the system board. Binds in the paper feed motor or gear train can cause intermittent false paper jam errors. Remove the paper feed motor and check the shaft for binds. Also check for loose or worn motor gear.
3	Gears	Check for binds in the gear train and paper feed mechanism by rotating the large feed roll by hand. If you notice a bind, isolate it by removing one of the small idler gears on the inside of the left side frame. Replace any worn or binding gears or rollers.
4	Paper Path	Perform the "Paper Path Service Check" on page 2-13, starting at Step 1.

Paper Path Service Check

Examine the printer for the following before you begin this service check:

- Check the entire paper path for obstructions.
- Be sure the paper guides are not worn or broken and are positioned against the paper without binding or buckling the paper.
- Be sure the correct type of paper is being used.
- Be sure the printer is installed on a flat surface.

	FRU	Action
1	Large and Small Feed Rollers	Check for wear and binds.
2	Small Feed Roller Springs	Check for damage.
3	Exit Roller Star Rollers Exit Drive Belt	Check for wear and binds.
4	Sheet Feeder	Check the following for wear or damage: • Paper pick assembly • All parts inside the left and right edge guides.
5	End-of-Forms Flag & Spring	Check for binds or damage.

Parallel Port Service Check (5770)

	FRU	Action
1	Parallel Port	Run a test page to be sure the printer can print. Run the "Parallel Port Wrap Test (5770)" on page 3-3

Photo Controller Service Check (5770)

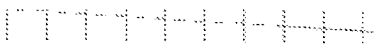
If the printer prints from a PC, but does not print from a Flash Card, or the printer prints from a Flash Card but does not print from a PC, continue with this service check.

	FRU	Action
1	Photo Controller Board	Disconnect the photo controller assembly from the printer by removing the photo controller cable from the system board. Run a "Test Page" on page 3-6. If the printer prints correctly, continue with this service check. If the printer has a print quality problem, go to the "Print Quality Service Check" on page 2-16. Run the "CompactFlash Test (5770)" on page 3-3 and the "SmartMedia Test (5770)" on page 3-3. If either test fails, replace the photo controller board. Run the "Parallel Port Wrap Test (5770)" on page 3-3. If the test fails, replace the photo controller board. Run the "DRAM Test (5770)" on page 3-4 and the "SRAM Test (5770)" on page 3-4. If the test fails, replace the photo controller board.
2	System Board System Board to Photo Controller Board Cable Photo Controller Board	Check the system board to photo controller board cable connections. Check for +5 V dc at pins P1-28 and P1-29 on the photo controller board. If incorrect, check the system board to photo controller board cable for continuity and replace the cable if necessary. If the symptoms remains, replace the photo controller board.

Power Service Check

	FRU	Action
1	Power Supply	Disconnect the power connector from the system board at (J4) and check the following voltages on the power supply cable: J4-3 to GND = +30 V dc If you do not have correct voltage, replace the power supply. Be sure to unplug the printer before you reconnect the power connector (J4) to the system board.
2	Printhead Cable Parallel Cable Encoder Card	Unplug the printer. Disconnect one of the printhead cables and re-plug the printer. Look for a symptom change. Check the failing part for shorts and replace as necessary. Repeat this procedure for the parallel cable and the encoder card.
3	Photo Controller Board (5770) Photo Controller Operator Panel (5770)	Remove the camera card from the camera card slot. Unplug the printer. Remove the photo controller assembly and disconnect the photo controller to system board cables. Re-plug the printer and look for a symptom change and replace the failing part. Unplug the printer and re-plug the photo controller cables. Disconnect the operator panel. Re-plug the printer and look for a symptom change and replace the failing part.
4	System Board	If the symptom has not changed, replace the system board.

Print Quality Service Check

	FRU	Action
1	Print Cartridge	Be sure the printer contains good print cartridges.
2	Printhead Carrier Assembly	Reseat the printhead cables in the system board and check the following parts for wear or damage: • Print Cartridge Latch • Latch Spring • Carrier
3	System Board Printhead Cable Rubber Backer	Perform the "Test Page" on page 3-6. Look for a break in the diagonal line of the test pattern. A broken line indicates one or more print nozzles are not working. Run the test again to verify the failure. If there are even breaks in the diagonal line similar to the pattern shown, replace the system board.  If there is a single break or random breaks in the diagonal line check the following: **Note:** Unplug the printer before cleaning contacts. • Check the gold-plated contacts, on the end of the cable that connect to the carrier, for dirt and wear. Use only a clean dry cloth to clean the contacts. Also check the cable for damage. You may need to remove the cable from the carrier to inspect it. • A worn rubber backer results in poor contact between the printhead cable and the print cartridge. Check the rubber backer for wear. • Refer to the test page. The temperature value is in Celsius.
4	Maintenance Station	Intermittent nozzle failures can be caused by worn parts in the maintenance station. Perform the "Maintenance Station Service Check" on page 2-8, then return to this check.

	FRU	Action
5	Paper Feed	Ink smudging and smearing can be caused by paper problems or problems in the paper feed area. Check the following: • Correct type of paper is being used. • Paper for curl or wrinkles. • Feed rollers for wear, dirt, or looseness. • Gears for wear or binds. • Paper path for obstructions.
6	Transport	Blurred print and voids can be caused by problems in the transport area. Check the following: • Transport belt for wear and full engagement into the carrier grip. • Carrier guide rod for wear or dirt. • Carrier to carrier frame engagement should be lubricated with grease P/N 99A0394. Lubricate the carrier guide rod and carrier frame on both sides where the two top bearing surfaces ride on the frame. • Idler pulley parts for wear, damage, or looseness. • Encoder strip for wear or dirt.
7	Alignment	Uneven vertical lines can be adjusted by performing the bidirectional alignment. The user is directed, through the Printer Control program, to perform the head to head and bidirectional printing alignments, when replacing a print cartridge. 5770 - Printhead alignment is also performed at the operator panel. The user is instructed to perform alignment settings at the operator panel. These settings are used to print photos from the flash card or an external storage drive.

Transport Service Check

	FRU	Action
1	Transport Motor	Check the motor for binds, or loose motor pulley. Disconnect the transport motor (J5) from the system board. Check for 8 to 18 ohms between pins 1 and 2 on the motor cable. If the reading is incorrect, replace the motor. Check for motor pins shorted to the motor housing. If you find a pin shorted to the housing, replace the motor. If the failure remains, replace the system board.
2	System Board	Disconnect (J5) from the system board and check for a pulse of 30 V dc between (J5-2) and ground as the printer goes through POST.
3	Carrier Guide Rod	Clean the carrier rod. **Note**: Lubricate the rod and the carrier rod bearing surface.
4	Transport Belt Idler Pulley Parts Carrier Frame	Check for worn, loose or broken parts. Check for obstructions blocking carrier movement. Carrier to carrier frame engagement should be lubricated with grease P/N 99A0394.
5	Encoder Strip Encoder Card	Check the encoder strip for wear, dirt and grease. Be sure all printhead connectors are fully seated. Check the cables for damage. Check the encoder card connection.
6	Printhead Cable Printhead Cable Guide Strip	Be sure all connectors are fully seated. Check the cables for damage. Some early level machines may experience a printhead cable popping noise. These machines can be identified by checking for a printhead cable relief hole in the carrier frame located above the maintenance station. If no printhead cable relief hole is present, install the printhead cable guide and clip.

	FRU	Action
7	Maintenance Station	A problem with the maintenance station can cause carrier movement problems at the right margin. Go to the "Maintenance Station Service Check" on page 2-9.

3. Diagnostic Aids

Paper Pick Assembly Operation

The paper pick assembly is a paper pick device that generates its own normal force which is inherent in the fundamental design of the pick arm. If light media is used, the paper pick assembly picks very gently; if a heavy media is used, it picks very aggressively.

The spring pressure of the device is designed so the input torque from the motor produces movement about the pivot of the arm causing a downward force at the pick roll. The friction between the pick roll and the paper produces a frictional locking condition. The arm must pivot freely through its full range of motion. If the pick assembly is noisy, replace the paper pick assembly.

Diagnostic Mode (5770)

To enter the Diagnostic Mode:

1. Unplug the power supply from the printer.
2. Press and hold the **Index** and **Print** buttons.
3. Plug the power supply into the printer.
4. Release the buttons when **Diagnostic Menu** appears in the Operator Panel Display.

Unplug the power supply from the printer to exit the Diagnostic Mode.

The tests display on the operator panel in the order shown:

- Code Level
- LCD
- Button
- CompactFlash
- SmartMedia
- Parallel Port
- Controller Port
- DRAM
- SRAM

Code Level (5770)

Displays the current code level on the Controller Board. Code upgrades to the Photo Controller Board can be down loaded from either camera card slot or through the parallel port such as an external storage drive. Use the following procedure to upgrade the code.

1. With power applied to the printer, insert the camera card containing the newer code level in the proper slot.
2. The message "Upgrading Flash ROM" will appear on the display and the busy light will blink.
3. Wait one minute. If the message "OK! Remove Card & Reset" does not appear, unplug the printer.
4. Replug the printer. The message "Upgrading Flash ROM" will appear once again.
5. Within a minute, the message "OK! Remove Card & Reset" will appear.
6. Remove the camera card from the slot, unplug and replug the printer.

LCD Test (5770)

To run the LCD Test:

1. Select **LCD Test** from the Diagnostic Menu. The LCD test runs continually.
2. Press **Cancel** to stop the test.

Button Test (5770)

To run the Button Test:

1. Select **Button Test** from the Diagnostic Menu. With no buttons pressed, **OP** (Open) appears several times on the display.
2. Press each button, one at a time, and a **CL** (Closed) appears in place of the **OP**. This checks the proper operation of each of the buttons.
3. Press **Print** and **Print All** together to stop the test.

CompactFlash Test (5770)

The purpose of this test is to check the connection between a CompactFlash camera card and the Photo Controller Board. This test performs a write, read and erase to the camera card.

To run the CompactFlash Test:

1. Insert a camera card into the CompactFlash slot (top slot).
2. Select **CompactFlash** from the Diagnostic Menu.
3. Press **Cancel** to stop the test.

Upon completion of the test, a **Pass** or **Fail** message appears in the display.

SmartMedia Test (5770)

The purpose of this test is to check the connection between a SmartMedia camera card and the Photo Controller Board. This test performs a write, read erase to the camera card.

To run the SmartMedia Test:

1. Insert a camera card into the SmartMedia slot (bottom slot).
2. Select **SmartMedia** from the Diagnostic Menu.
3. Press **Cancel** to stop the test.

Upon completion of the test, a **Pass** or **Fail** message appears in the display.

Parallel Port Wrap Test (5770)

This test performs a wrap around test between the printer parallel port and the parallel port test connector.

To run the Parallel Port Test:

1. Install a parallel wrap plug (P/N 1319128) in the parallel port.
2. Select **Parallel Port** from the Diagnostic Menu.
3. Press **Cancel** to stop the test.

Upon completion of the test, a **Pass** or **Fail** message appears in the display.

Controller Port Test (5770)

This test is not used for servicing the printer.

DRAM Test (5770)

The purpose of this test is to check the validity of DRAM on the Photo Controller Board. The test writes patterns of data to DRAM to verify that each bit in memory can set and read correctly.

To run the DRAM Test:

1. Select **DRAM Test** from the Diagnostic Menu.
2. Press **Cancel** to stop the test.

Upon completion of the test, a **Pass** of **Fail** message appears in the display.

SRAM Test (5770)

The purpose of this test is to check the validity of SRAM on the Photo Controller Board. The test writes patterns of data to SRAM to verify that each bit in memory can set and read correctly.

To run the SRAM Test:

1. Select **SRAM Test** from the Diagnostic Menu.
2. Press **Cancel** to stop the Test.

Upon completion of the test, a **Pass** or **Fail** message appears in the display.

End of Forms (EOF) Test

This test checks the EOF sensor on the system board.

During the test, the Busy light remains on and shows the EOF sensor status as follows:

- On - paper is in sensor
- Off - paper is not in sensor

To run the test:

1. Remove all paper and turn the printer on.
2. Insert a single sheet of paper into the sheet feeder until the EOF flag activates and the Busy light comes on. The paper feeds momentarily.
3. Press the Paper Feed button and the paper ejects as the Busy light turns off.
4. If the preceding steps fail to occur, the sensor is bad. Replace the system board.

Test Page

This test prints the test page.

To run a complete test page of black and color patterns, be sure the print cartridges are in good condition. Install a black print cartridge in the right side of the printhead cradle and a color print cartridge in the left side.

To enter the test:

1. Unplug the printer.
2. Ensure the manual paper slot is empty.
3. To start the test, press and hold the Paper Feed button while plugging the printer in. Release the button when the printer completes POST.

The test page contains the following:

- Code level and date
- Current Celsius temperature
- Nozzle test pattern for both cartridges
- Purge test for both cartridges
- Text (printer model)
- Paper test results

4. Repair Information

This chapter explains how to make adjustments to the printer and how to remove defective parts.

Note: Read the following before handling electronic parts. When working on the printer, always unplug the printer from the electrical outlet. High voltage is present in the power supply as long as it is plugged into the electrical outlet.

Handling ESD-Sensitive Parts

Many electronic products use parts that are known to be sensitive to electrostatic discharge (ESD). To prevent damage to ESD-sensitive parts, follow the instructions below in addition to all the usual precautions, such as turning off power before removing logic boards:

- Keep the ESD-sensitive part in its original shipping container (a special "ESD bag") until you are ready to install the part into the printer.
- Make the least-possible movements with your body to prevent an increase of static electricity from clothing fibers, carpets, and furniture.
- Put the ESD wrist strap on your wrist. Connect the wrist band to the system ground point. This discharges any static electricity in your body to the printer.
- Hold the ESD-sensitive part by its edge connector shroud (cover); do not touch its pins. If you are removing a pluggable module, use the correct tool.
- Do not place the ESD-sensitive part on the printer cover or on a metal table; if you need to put down the ESD-sensitive part for any reason, first put it into its special bag.
- Printer covers and metal tables are electrical grounds. They increase the risk of damage because they make a discharge path from your body through the ESD-sensitive part. (Large metal objects can be discharge paths without being grounded.)
- Prevent ESD-sensitive parts from being accidentally touched by other personnel. Install printer covers when you are not working on the printer, and do not put unprotected ESD-sensitive parts on a table.
- If possible, keep all ESD-sensitive parts in a grounded metal cabinet (case).
- Be careful in working with ESD-sensitive parts when cold weather heating is used because low humidity increases static electricity.

Adjustments

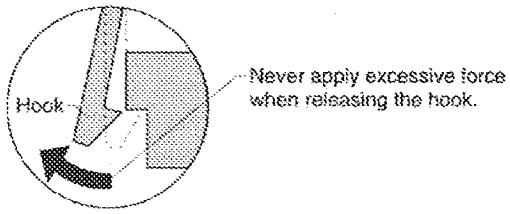
The user is directed, in the Printer Control program, to perform the head to head and bidirectional alignment adjustments after replacing a print cartridge.

Removal Procedures

The following procedures are arranged according to the name of the printer part discussed. Unplug the power cord before removing any parts.

Releasing Plastic Latches

Many of the parts are held in place with plastic latches. The latches break easily; release them carefully. To remove such parts, press the hook end of the latch away from the part to which it is latched.



Base Assembly Removal

1. Remove the four screws from the left and right exit tray bases and remove the bases. During reassembly, do not overtighten the screws, as this may strip the plastic.
2. Remove the accent cover.
3. Remove the three screws from the left and right covers.
4. Remove the center cover.
5. Disconnect the power connector at the system board.
6. Remove the three screws securing the carrier frame to the base cover.
7. Slide the printer off the base cover.

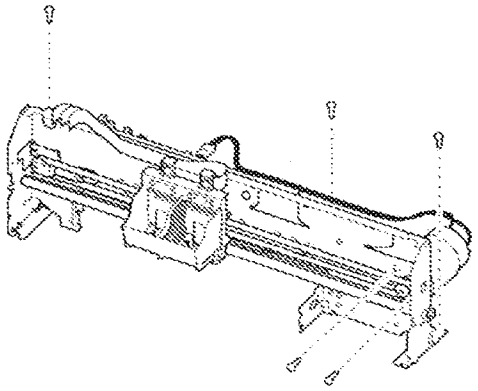
Carrier Belt Removal

1. Remove the four screws from the left and right exit tray bases and remove the bases. During reassembly, do not overtighten the screws, as this may strip the plastic.
2. Remove the accent cover.
3. Remove the three screws from the left and right covers.
4. Remove the center cover.
5. Remove the printhead carrier assembly.
6. Push the idler pulley to the right to release the tension on the belt and remove the belt.

Note: When reinstalling the carrier belt, place the carrier at the center position between the tabs on either end of the belt.

Carrier Frame Assembly Removal

1. Remove all covers, refer to "Covers (Complete) Removal" on page 4-5.
2. Disconnect the power connector at the system board.
3. Remove the sheet feeder assembly.
4. Remove the three screws securing the carrier frame to the base cover. During reassembly, do not overtighten the screws, as this may strip the plastic.



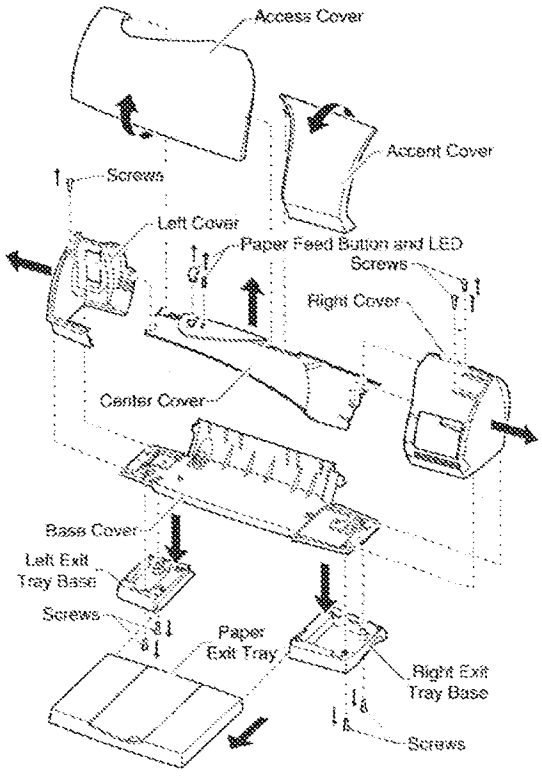
5. Slide the printer off the base cover.

Carrier Transport Motor Removal

1. Remove all covers (except the left and base covers), refer to "Covers (Complete) Removal" on page 4-5.
2. Disconnect the transport motor connector from the system board.
3. Remove the belt from the transport motor pulley.
4. Remove the two screws securing the transport motor to the carrier frame and remove the motor. Note the routing of the motor cable. During reassembly, do not overtighten the screws, as this may strip the plastic.

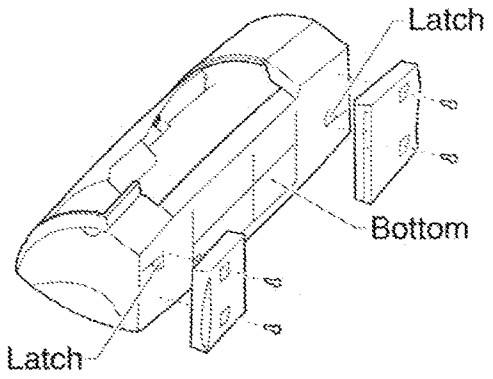
Covers (Complete) Removal

1. Open the access door and remove the accent cover.
2. Remove one screw from the left cover and two screws from the right cover.
3. Lay the machine on its back and remove the four screws from the left and right tray bases.
4. Remove the tray bases and the exit tray.
5. Unlatch the right cover from the base, slide it to the right and remove the right cover.
6. Remove the center cover.
7. Unlatch the left cover from the base, slide it to the left and remove the left cover.



Cover (Center) Removal

1. Remove the two screws from the right exit tray base and remove the base. During reassembly, do not overtighten the screws, as this may strip the plastic.
2. Open the access door and lift the top edge of the accent cover pulling forward to remove.
3. Remove the two screws from the right cover and press and unlatch the cover from the bottom.
4. Remove the right cover by sliding it to the right.
5. Remove the screw that secures the center cover and remove the center cover.



Encoder Card Removal

1. Remove all covers (except the base), refer to "Covers (Complete) Removal" on page 4-5.
2. Remove the printhead carrier assembly.
3. Disconnect the printhead cable from the encoder card.
4. Remove the screw from the encoder card and remove the card.

Encoder Strip Removal

1. Remove all covers (except the base), refer to "Covers (Complete) Removal" on page 4-5.
2. Remove the printhead carrier assembly.
3. Gently release the tension on the encoder strip by flexing the encoder strip tensioner and remove the encoder strip.

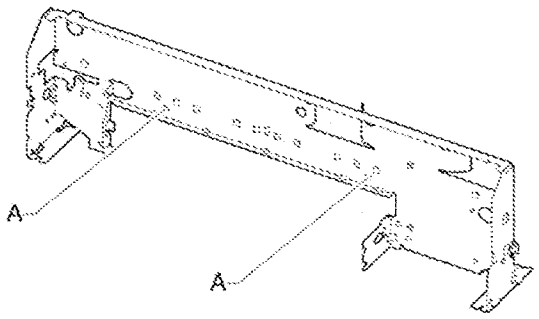
Note: When reinstalling the encoder strip, make sure the ends of the strip are centered in their mounting notches and the strip does not bind in the encoder card on the carrier.

Install the strip with the graphic on the left side as follows:

- Arrow **Up** -- "F" **Down**

EOF Flag Assembly and Holder Removal

1. Remove all covers, refer to "Covers (Complete) Removal," on page 4-5.
2. Remove the carrier frame assembly.
3. Remove the encoder strip.
4. Remove the system board.
5. Remove the sheet feeder assembly.
6. Remove the four small feed roll springs.
7. Push the locking tabs **[A]** to the rear and pull the holder down and out of the carrier frame.



Exit Drive Belt Removal

1. Remove all covers, refer to "Covers (Complete) Removal." on page 4-5.
2. Remove the carrier frame assembly.
3. Remove the two screws from the star roller assembly and remove the assembly. Do not overtighten the screws, as this may strip the plastic.
4. Remove the printhead carrier assembly.
5. Remove the maintenance station.
6. Unhook the springs from the small feed rollers.
7. Remove the small feed rollers by unlatching them from the feed roller holder.
8. Remove the mid-frame assembly by pushing it forward from the rear and out of the machine.
9. Remove the right large feed roller bushing.
10. Remove the large feed roller.
11. Remove the exit roller assembly.
12. Replace the exit drive belt.

Exit Roller Removal

1. Open the access door.
2. Remove the two screws from the star roller assembly and remove the assembly. Do not overtighten the screws, as this may strip the plastic.
3. Unlatch the right side of the exit roller and remove the exit drive belt from the exit roller pulley.
4. Remove the exit roller.

Gear Plate Removal

1. Remove all covers, refer to "Covers (Complete) Removal," on page 4-5.
2. Unplug the power connector.
3. Remove the frame from the base and remove the carrier.
4. Remove the maintenance station assembly.
5. Remove the mid-frame assembly.
6. Unplug the paper feed motor.
7. Remove the two screws from the gear plate and remove the gear plate. During reassembly, do not overtighten the screws, as this may strip the plastic.

Gutter Pad Removal

1. Open the access door and remove the accent cover.
2. Remove the right exit tray base.
3. Remove the accent cover.
4. Remove the right cover.
5. Remove the maintenance station.
6. Remove the gutter pad.

Large Feed Roll Removal

1. Remove all covers, refer to "Covers (Complete) Removal" on page 4-5.
2. Remove the carrier frame assembly from the base.
3. Remove the printhead carrier assembly.
4. Remove the maintenance station.
5. Remove the mid-frame assembly.
6. Remove the large feed roller.

Maintenance Station Assembly Removal

1. Open the access cover.
2. Remove the accent cover.
3. Remove the right exit tray base.
4. Remove the right cover.
5. Unlatch the two clips at the rear of the maintenance station and slide the assembly forward, out of the printer.

Maintenance Wipers and Caps Removal

1. Open the access cover.
2. Push the carrier to the left away from the maintenance station.
3. Remove the accent cover.
4. Remove the right exit tray base.
5. Remove the right cover.
6. Remove the wipers and caps.

Note: Be sure the wipers are completely seated.

Mid-Frame Assembly Removal

1. Remove all covers, refer to "Covers (Complete) Removal" on page 4-5.
2. Remove the carrier frame assembly.
3. Remove the two screws from the star roller assembly and remove the assembly. During reassembly, do not overtighten the screws, as this may strip the plastic.
4. Remove the printhead carrier assembly.
5. Remove the maintenance station assembly.
6. Unhook the springs from the small feed rollers.
7. Remove the small feed rollers by unlatching them from the feed roller holder.
8. Remove the mid-frame assembly.

Paper Feed Motor Removal

1. Remove the accent cover.
2. Remove the screws from the left and right covers. During reassembly, do not overtighten the screws, as this may strip the plastic.
3. Remove the right and left exit tray bases.
4. Remove the left, right and center covers.
5. Disconnect the paper feed motor connector from the system board.
6. Remove the gear plate assembly.
7. Remove the two screws securing the paper feed motor and remove the motor. Note the routing of the motor cable.

Paper Pick Assembly Removal

1. Remove all covers (except the base), refer to "Covers (Complete) Removal" on page 4-5.
2. Remove the left and right bezel from the sheet feeder.
3. Remove the C-clip from the right side of the pick roll shaft.
4. Pull the pick roll shaft out to the left and remove the paper pick assembly. Note the orientation of the paper pick assembly spring.

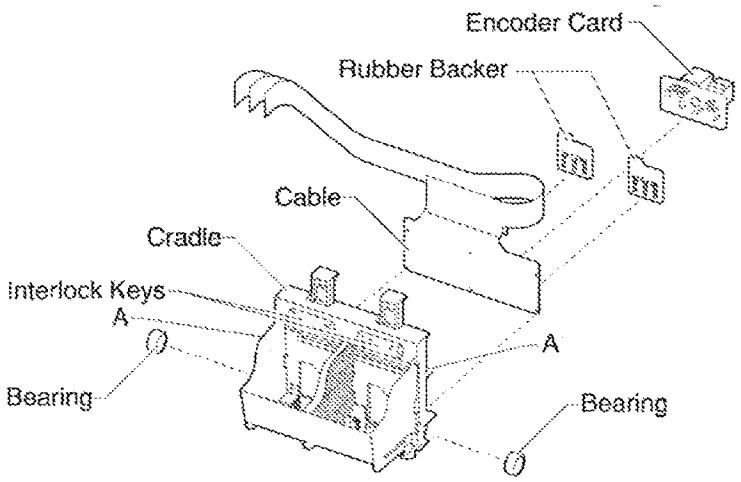
Photo Controller Assembly Removal (5770)

1. Remove the two rear screws securing the photo controller base to the printer base.
2. Remove the screw securing the photo controller to the center cover.
3. Unlatch the latch securing the photo controller cover to the rear of the printer base.
4. Slide the photo controller assembly to the left off the printer base.

   Note: When replacing the photo controller board, the printing alignments will be reset to factory defaults. The user should be instructed to perform the "Align Cartridge" procedure to optimize photo printing.

Printhead Cable and Cradle Removal

1. Remove the accent, right and center covers.
2. Remove the printhead carrier assembly.
3. Disconnect the printhead cable from the encoder card. Note the routing of the cable under the retaining clip on the carrier.
4. Separate the cradle from the printhead carrier assembly by pushing out the cradle latches [**A**].



5. Feed the folded end of the printhead cable through the opening in the carrier assembly and remove the cable.

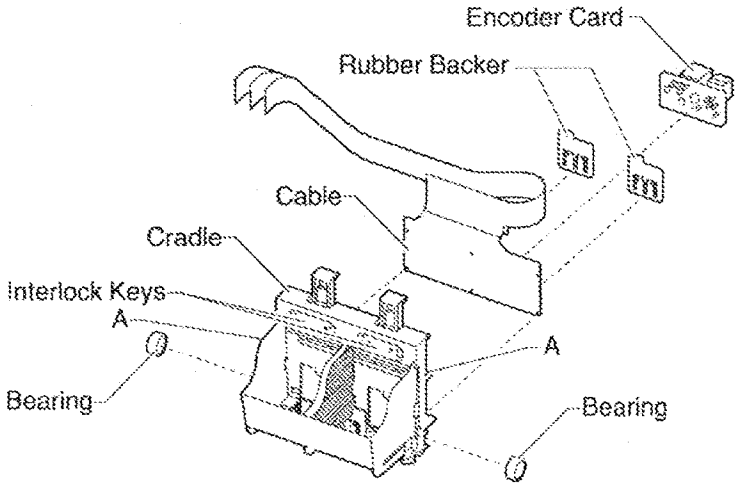
Note: Use the illustration to assemble the carrier parts in the correct sequence.

Printhead Carrier Assembly Removal

1. Remove all covers (except the base), refer to "Covers (Complete) Removal" on page 4-5.
2. Unlock the three printhead cable connectors and disconnect the printhead cable from the system board.
3. Remove the spring clips from the ends of the carrier guide rod and move the carrier to the left.
4. Remove the carrier guide rod by sliding it to the left.
5. Remove the carrier assembly by lifting upward, taking care to clear the encoder strip before pulling the carrier assembly out.
6. Disconnect the carrier belt.
7. When installing the belt, connect the carrier between the two raised markers on the belt.

Printhead Rubber Backer Removal

1. Remove all covers, refer to "Covers (Complete) Removal" on page 4-5.
2. Remove the printhead carrier assembly.
3. Separate the cradle from the printhead carrier assembly by pushing out the cradle latches [**A**].



4. Remove the rubber backer and paper deflector from under the printhead carrier cable.

Note: Use the illustration to assemble the carrier parts in the correct sequence.

Sheet Feeder Removal

1. Remove all covers (except the base), refer to "Covers (Complete) Removal" on page 4-5.
2. Remove the three screws that secure the sheet feeder to the carrier frame. During reassembly, do not overtighten the screws, as this may strip the plastic.
3. Remove the sheet feeder assembly.

Note: Take note of the routing of all cables.

Small Feed Roller Removal

1. Remove all covers, refer to "Covers (Complete) Removal" on page 4-5.
2. Remove the sheet feeder assembly.
3. Unhook the small feed roller springs and remove the rollers by pushing them down at the rear.

Star Roller Removal

1. Open the access door.
2. Remove the two screws from the star roller assembly and remove the assembly. During reassembly, do not overtighten the screws, as this may strip the plastic.

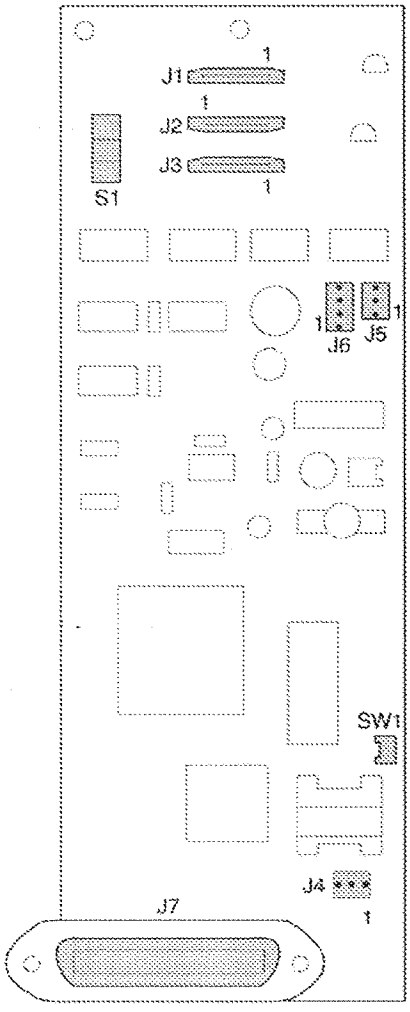
System Board Removal

1. Remove all covers (except the base), refer to "Covers (Complete) Removal" on page 4-5.
2. Unlock the three printhead cable connectors and disconnect the printhead cables from the system board.
3. Disconnect the other cables from the system board.
4. Remove the three screws securing the system board to the carrier frame and remove the system board. Note the routing of the paper feed motor cable. Pull the EOF flag out of the sensor while removing the system board. During reassembly, do not overtighten the screws, as this may strip the plastic.

5. Connector Locations

System Board Connectors (5000, 5700)

J1	Printhead Cable 1
J2	Printhead Cable 2
J3	Printhead Cable 3
J4	Power Connector
J5	Transport Motor
J7	Parallel Port
SW1	Paper Feed Switch
S1	EOF Sensor



System Board Connectors (5770)

J1	Printhead Cable 1
J2	Printhead Cable 2
J3	Printhead Cable 3
J4	Power Connector
J5	Transport Motor
J6	Paper Feed Motor
J9	Photo Controller Cable
J10	Photo Controller Cable Shield
SW1	Paper Feed Switch
S1	EOF Sensor

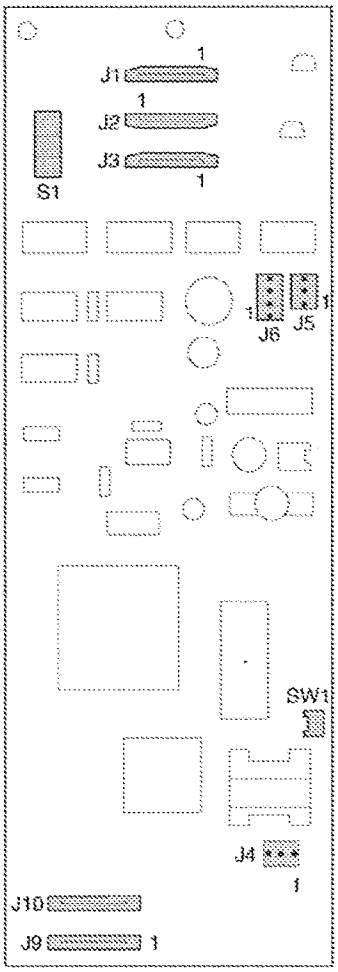
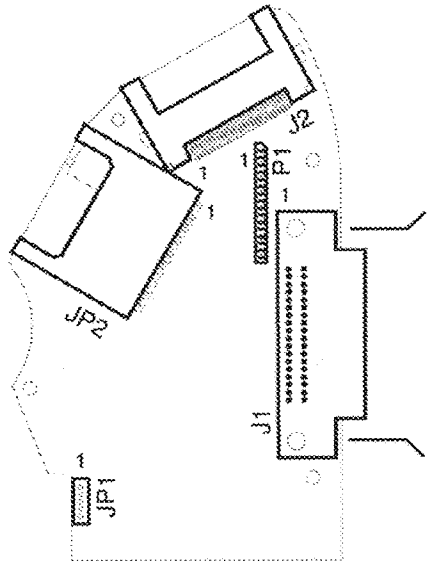


Photo Controller Board Connectors (5770)

J1	Parallel Port
J2	CompactFlash Card
JP1	Operator Panel
JP2	SmartMedia Card
P1	Photo Controller to System Board



6. Preventive Maintenance

This chapter contains the lubrication specifications. Follow these recommendations to prevent problems and maintain optimum performance.

Lubrication Specifications

Lubricate only when parts are replaced or as needed, not on a scheduled basis. Use grease P/N 99A0394 to lubricate the following:

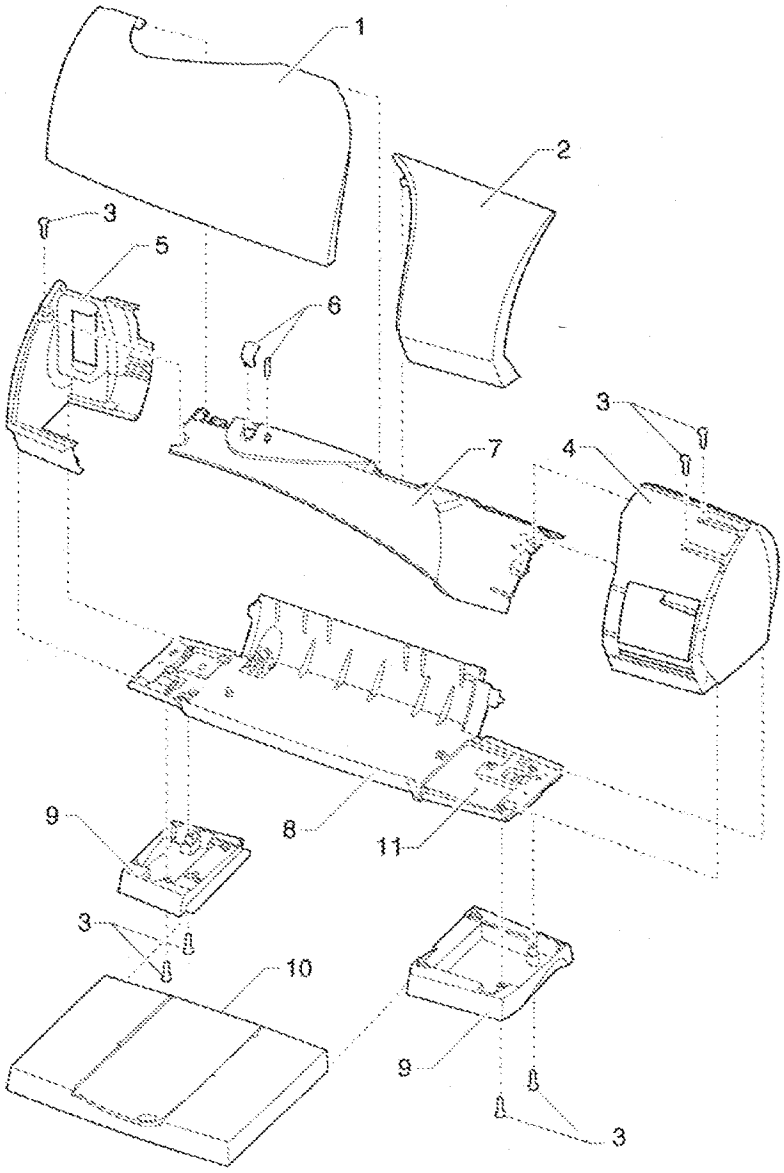
- All gear mounting studs.
- The left and right ends of the large feed roller at the side frames.
- Both ends of the sheet feeder pick roll shaft at the side frames.
- The carrier to carrier frame engagement.
- The carrier guide shaft, and carrier guide shaft bearings.
- Both ends of the exit roller shaft.

7. Parts Catalog

How To Use The Parts Catalog

- SIMILAR ASSEMBLIES: If two assemblies contain a majority of identical parts, they are shown on the same list. Common parts are shown by one index number. Parts peculiar to one or the other of the assemblies are listed separately and identified by description.
- NS: (Not Shown) in the Asm-Index column indicates that the part is procurable but is not shown in the illustration.
- PP: in the Description column indicates the part is available in the listed parts packet.

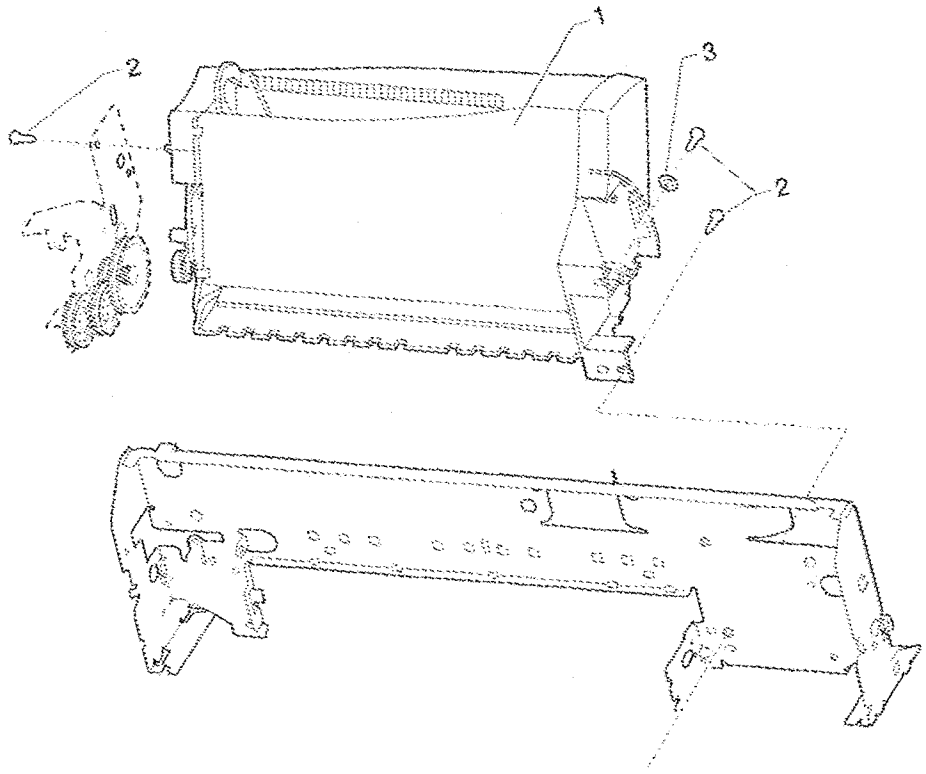
Assembly 1: Covers



Assembly 1: Covers

Asm-Index	Part Number	Units	Description
1 -1	13A3842	1	Cover, Front Access (4093-S01,S04)(4094-S01)
1	13A3843	1	Cover, Front Access (4093-S02) (4094-S02)
2	13A3846	1	Cover, Accent (4094-S01)
2	13A3848	1	Cover, Accent (4093-S01)
2	13A3849	1	Cover, Accent (4093-S02)
2	13A3847	1	Cover, Accent (4094-S02)
3	17A0138	3	Screws, PP
4	13A3852	1	Cover, Right (4093-S01,S04) (4094-S01)
4	13A3853	1	Cover, Right (4093-S02) (4094-S02)
5	13A3844	1	Cover, Left (4093-S01,S04) (4094-S01)
5	13A3845	1	Cover, Left (4093-S02) (4094-S02)
6	13A3856	1	Lens (LED) & Power Button
7	13A3854	1	Cover, Center (4093-S01,S04)(4094-S01)
7	13A3855	1	Cover, Center (4093-S02) (4094-S02)
8	13A3840	1	Base Asm includes Feet, Gutter Pad (4093-S01,S04) (4094-S01)
8	13A3841	1	Base Asm includes Feet, Gutter Pad (4093-S02) (4094-S02)
9	13A3861	1	Exit Tray Base (L & R) (4093-S01,S04)
9	13A3862	1	Exit Tray Base (L & R) (4093-S02)
10	17A0100	1	Exit Tray Asm (4093-S01,S04)
10	17A0101	1	Exit Tray Asm (4093-S02)
11	13A3857	1	Gutter Pad
NS	7349594	1	Plain Package B/M (5000-5700)includes: (Carton, Cushion Set, Sealing Tape)
NS	7350305	1	Plain Package B/M (5770) includes: (Carton, Cushion Set, Sealing Tape)
NS	12G0149	1	Packet of 20 Feet

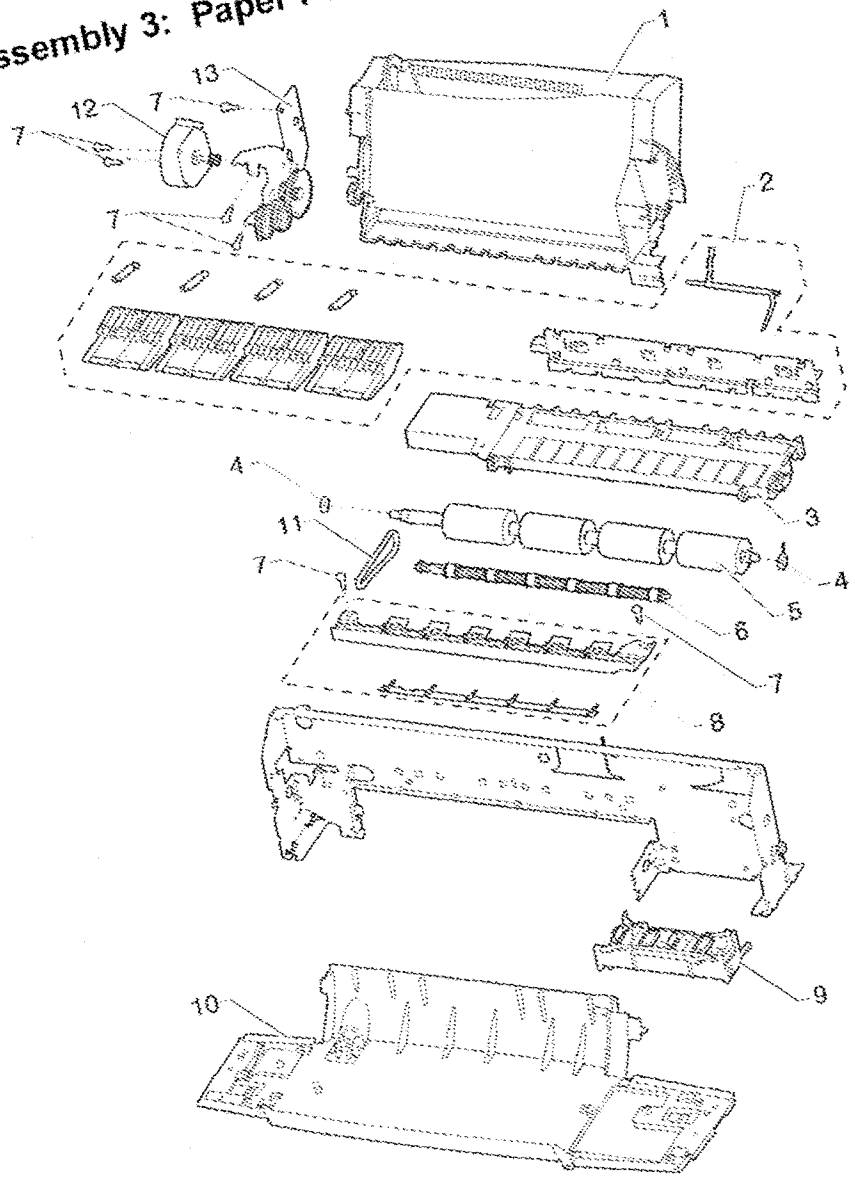
Assembly 2: Frames



Assembly 2: Frames

Asm-Index	Part Number	Units	Description
2-1	17A0132	1	Sheet Feeder Asm (4093-S01,S04) (4094-S01)
1	17A0133	1	Sheet Feeder Asm (4093-S02) (4094-S02)
2	17A0138	3	Screws, PP
3	12G0249	1	Washers, (packet of 10) ASF Right Mounting Screw (PP)
NS	17A0493	5	Printhead Cable Guide Strip & Clip
NS	17A0748	5	Pulley Cuff & Printhead Cable Pad

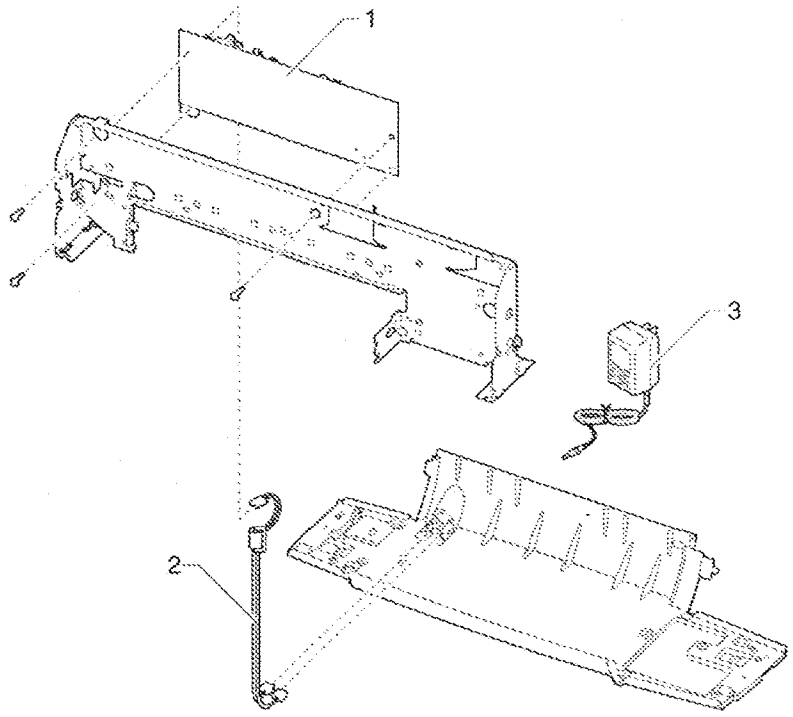
Assembly 3: Paper Feed



Assembly 3: Paper Feed

Asm-Index	Part Number	Units	Description
3-1	17A0132	1	Sheet Feeder Asm (4093-S01,S04) (4094-S01)
1	17A0133	1	Sheet Feeder Asm (4093-S02)(4094-S02)
2	17A0106	1	Small Feed Roll Asm w/Holder & Flag
3	17A0104	1	Mid Frame
4	17A0138	2	Bushing, Large Feed Roll (PP)
5	17A0108	1	Large Feed Roll Asm
6	17A0111	1	Exit Roller and Pulley B/M
7	17A0138	2	Screw, Paper Feed Motor (PP)
8	17A0107	1	Star Roller Crossbar Asm
9	17A0136	1	Maintenance Station Asm
10	13A3840	1	Base Asm, Includes Feet & Gutter Pad (4093-S01,S04) (4094-S01)
10	13A3841	1	Base Asm, Includes Feet & Gutter Pad (4093-S02) (4094-S02)
11	17A0112	1	Exit Drive Belt
12	17A0109	1	Paper Feed Motor Asm with Idler Gear
13	17A0110	1	Gears Plate Asm without Motor

Assembly 4: Electronics



Assembly 4: Electronics

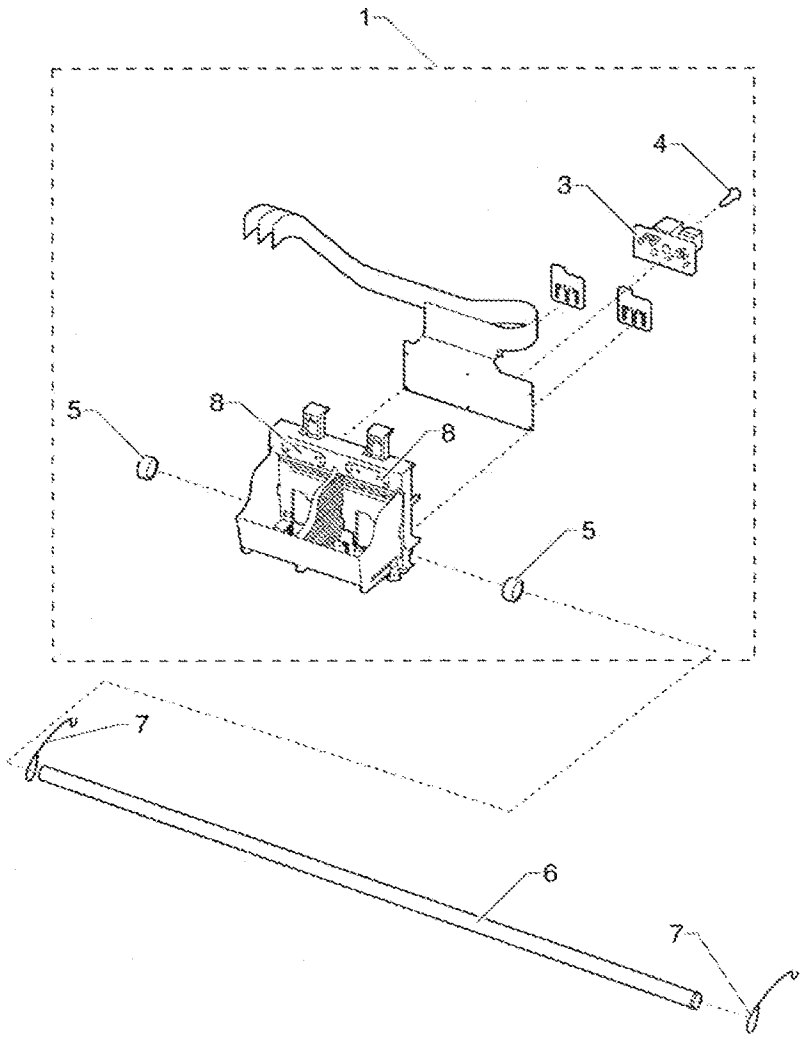
Asm-Index	Part Number	Units	Description
4-1	13A4494	1	**.5mm to 1 mm** conversion kit for 4093 (Contains Carrier Asm and System Board)
1	13A4497	1	**.5mm to 1 mm** conversion kit for the 4094 (Contains Carrier Asm and System Board)
1	17A0116	1	System Board - See **Notice** below **1 mm width** (4093-S01, S02)
1	17A0118	1	System Board - See **Notice** below **1 mm width** (4094-S01, S02)
2	17A0120	1	Power Connector
3	13A3593	1	Power Supply, External 100 V (4093-S01, S02) (4094-S01, S02)
3	13A3594	1	Power Supply, External 120-127 V (4093-S01, S02) (4094-S01, S02)
3	13A3595	1	Power Supply, External 220-240 V (4093-S01, S02) (4094-S01, S02)
NS	11B6073	1	Power Cable (United Kingdom)
NS	11B6074	1	Power Cable (Europe)
NS	11B6075	1	Power Cable (Israel)
NS	11B6076	1	Power Cable (Australia /New Zealand)
NS	11B6077	1	Power Cable (South Africa)
NS	17A0119	1	Cover, System Board

Cable Notice

Check the printhead cable connectors to determine the correct system board replacement.

- **.5 mm width**
  .5 mm cable with 0.625 inch (16 mm) width at connectors (J1, J2, J3)
- **1 mm width**
  1 mm cable with 1.25 inch (32 mm) width at connectors (J1, J2, J3)

Assembly 5: Carrier

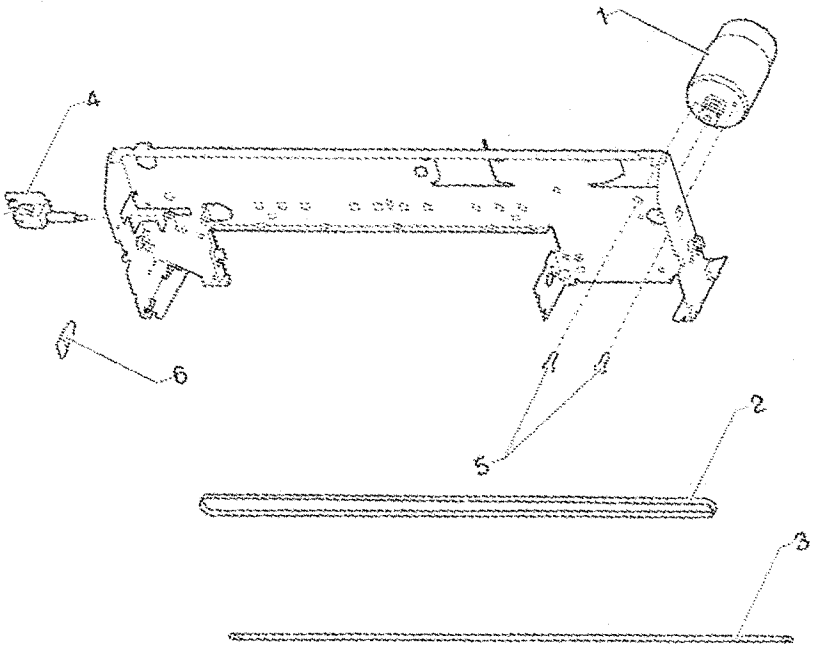


Assembly 5: Carrier

Asm-Index	Part Number	Units	Description
5-1	17A0139	1	Printhead Carrier Asm - see "Cable Notice" on page 7-9 **1 mm width** (4093-S01, S02, S04)
1	17A0140	1	Printhead Carrier Asm - see "Cable Notice" on page 7-9 **1 mm width** (4094-S01, S02)
3	17A0126	1	Encoder Card Asm w/ Thermistor (4093-S01, S02, S04)
3	17A0127	1	Encoder Card Asm w/ Thermistor (4094-S01, S02)
4	17A0138	1	Screw, Encoder Card Mount (PP)
5	17A0138	2	Bearing, Carrier (PP)
6	17A0125	1	Carrier Guide Rod
7	17A0138	2	Retainers, Shaft (PP)
8	17A0128	1	Printhead Cartridge Interlock Key B/M
NS	13A3860	1	Garage Asm

4093/4094

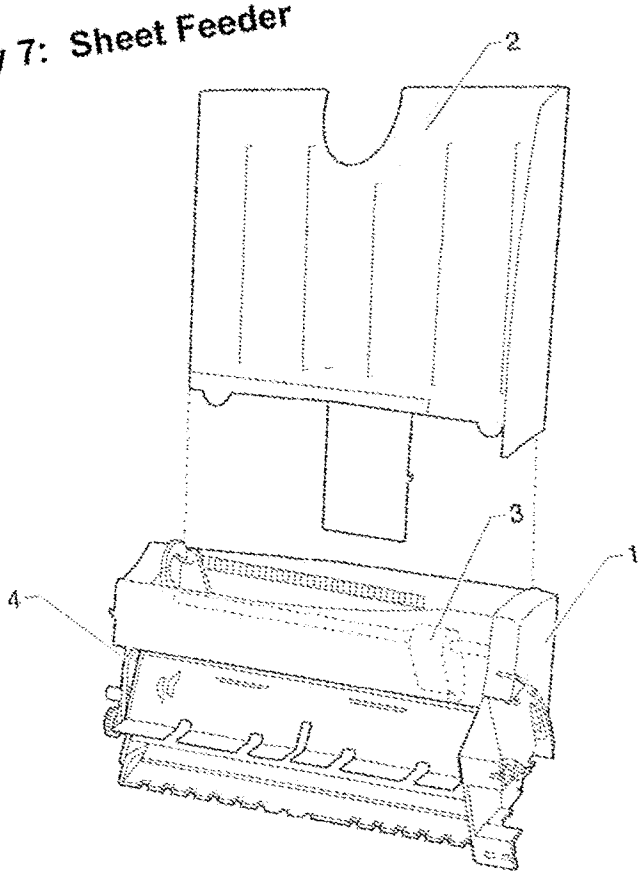
Assembly 6: Carrier Transport



Assembly 6: Carrier Transport

Asm-Index	Part Number	Units	Description
6-1	17A0129	1	Motor, Carrier Transport Asm & Pulley (DC)
2	17A0130	1	Carrier Belt
3	17A0131	1	Encoder Strip
4	17A0138	1	Idler Pulley Tension Asm (PP)
5	17A0138	2	Screw, Carrier Transport Motor (PP)
6	12G0164	5	Retainer, Encoder Strip (5 in packet)

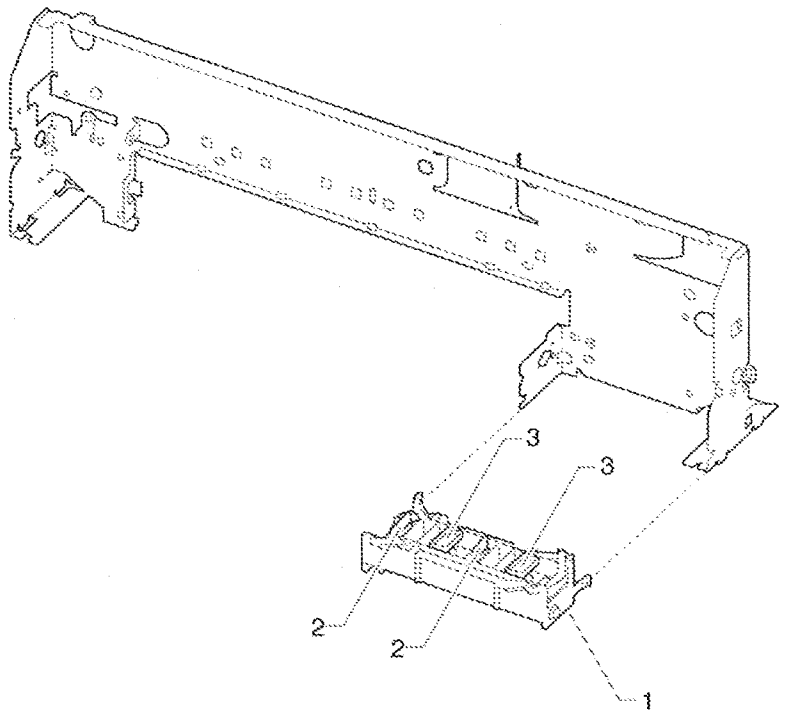
Assembly 7: Sheet Feeder



Assembly 7: Sheet Feeder

Asm-Index	Part Number	Units	Description
7-1	17A0132	1	Sheet Feeder Asm (4093-S01,S04) (4094-S01)
1	17A0133	1	Sheet Feeder Asm (4093-S02) (4094-S02)
2	17A0102	1	Support, Paper (4093-S01,S04) (4094-S01)
2	17A0103	1	Support, Paper (4093-S02) (4094-S02)
3	17A0134	1	Paper Pick Assembly
4	17A0135	1	Belt, Sheet Feeder Drive

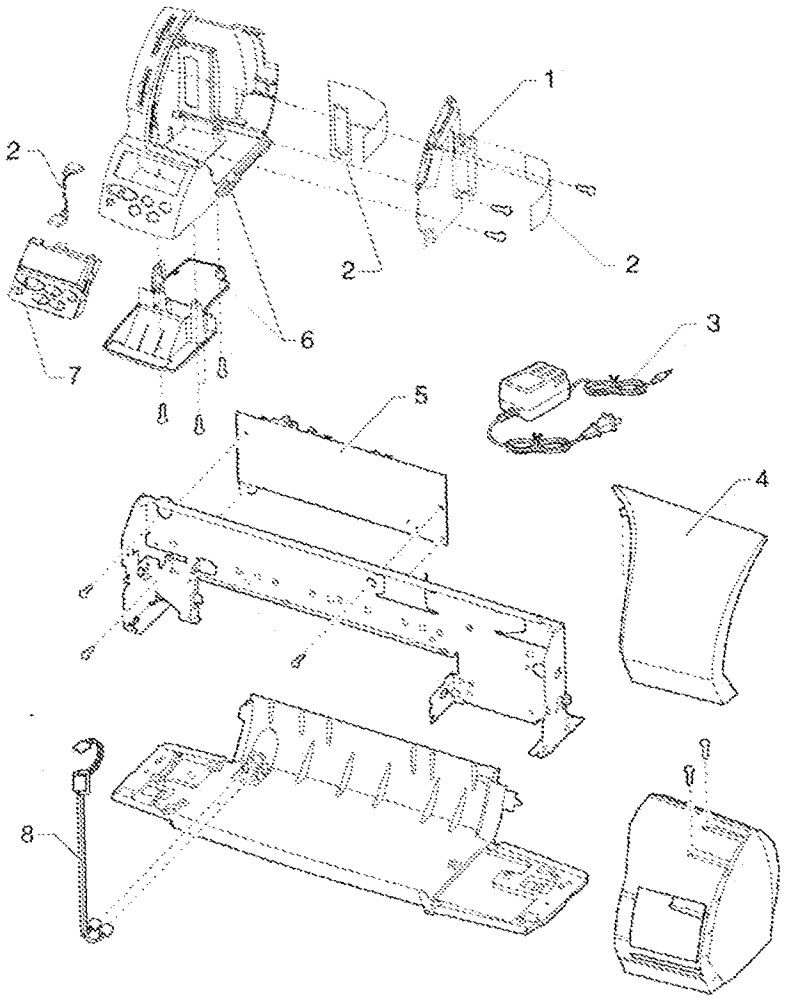
Assembly 8: Maintenance Station



Assembly 8: Maintenance Station

Asm-Index	Part Number	Units	Description
8-1	17A0136	1	Maintenance Station Asm
2, 3	17A0137	1	Wiper and Cap B/M (one of each)

Assembly 9: Photo Controller



Assembly 9: Photo Controller

Asm-Index	Part Number	Units	Description
9-1	12G0142	1	Board, Photo Controller
2	12G0145	1	Cables, Operator Panel and System Board and a System Board Cable Shield.
3	14R0172	1	Power Supply, External 100 V
3	14R0173	1	Power Supply, External 120-127 V
3	14R0174	1	Power Supply, External 220-240 V
4	12G0146	1	Cover, Accent
5	12G0141	1	Board, System
6	12G0143	1	Covers, Photo Controller
7	12G0144	1	Panel, Operator
8	17A0120	1	Power Connector

Index

A

Abbreviations 1-6
Adjustments 4-2
arallel 2-13
Assemblies
  1 Covers 7-2
  2 Frames 7-4
  3 Paper Feed 7-6
  4 Electronics 7-8
  5 Carrier 7-10
  6 Carrier Transport 7-12
  7 Sheet Feeder 7-14
  8 Maintenance Station 7-16
  9 Photo Controller 7-18

C

Connectors
  Photo Controller (5770) 5-3
  System Board (5000, 5700) 5-1
  System Board (5770) 5-2

D

Diagnostic Aids
  End of Forms Test 3-5
  Paper Pick Assembly 3-1
  Test Page 3-6

E

Error Indicator Table 2-2
ESD-Sensitive Parts 4-1

L

Lubrication Specifications 6-1

M

Maintenance Approach 1-5
Models 1-1

P

Parallel 2-13
Plastic Latches 4-2
POST
  POST Symptom Table 2-4
  Sequence 2-3
  Sequence (5770) 2-3
Power Consumption 1-5
Problems
  Carrier Transport 2-5
  Communications 2-5
  Maintenance Station 2-5
  Paper Feed 2-6
  Paper Feed Button 2-5
  Paper Status Light 2-6
  Power 2-6
  Print Quality 2-7

R

Removal 4-5
Removals
  Base Assembly 4-3
  Carrier Belt 4-3
  Carrier Frame 4-4
  Carrier Transport Motor 4-4
  Center Cover 4-5
  Covers (Complete) 4-5
  Encoder Card 4-6
  Encoder Strip 4-7
  EOF Flag Asm 4-7
  Exit Drive Belt 4-8
  Exit Roller 4-8
  Gear Plate 4-9
  Gutter Pad 4-9
  Large Feed Roll 4-9
  Maintenance Caps 4-10
  Maintenance Station 4-10
  Maintenance Wipers 4-10
  Mid-Frame Assembly 4-9, 4-10
  Paper Feed Motor 4-11
  Paper Pick Assembly 4-11
  Photo Controller Asm 4-11
  Printhead Cable & Cradle 4-12
  Printhead Carrier Asm 4-13
  Printhead Rubber Backer 4-14
  Sheet Feeder 4-15

Small Feed Roller 4-15
Star Roller 4-15
System Board 4-15

S

Safety Information viii
Service Checks
First Print Line 2-8
Maintenance Station 2-9
Paper Feed 2-11
Paper Path 2-13
Parallel Port (5770) 2-13
Power 2-15
Print Quality 2-16
Transport 2-18
Symptom Table (POST) 2-4
Symptom Tables 2-5

T

Tests
Button 3-2
Code Level 3-2
CompactFlash 3-3
Controller Port 3-4
DRAM 3-4
End of Forms (EOF) 3-5
LCD 3-2
Parallel Port (5770) 3-3
SmartMedia 3-3
SRAM 3-4
Test Page 3-6

Part Numbers

11B6073 7-9
11B6074 7-9
11B6075 7-9
11B6076 7-9
11B6077 7-9
12G0141 7-19
12G0142 7-19
12G0143 7-19
12G0144 7-19
12G0145 7-19
12G0146 7-19
12G0164 7-13
12G0249 7-5
13A3593 7-9
13A3594 7-9
13A3595 7-9
13A3840 7-3, 7-7
13A3841 7-3, 7-7
13A3842 7-3
13A3843 7-3
13A3844 7-3
13A3845 7-3
13A3846 7-3
13A3847 7-3
13A3848 7-3
13A3849 7-3
13A3852 7-3
13A3853 7-3
13A3854 7-3
13A3855 7-3
13A3856 7-3
13A3857 7-3
13A3860 7-11
13A3861 7-3
13A3862 7-3
13A4494 7-9
13A4497 7-9
14R0172 7-19
14R0173 7-19
14R0174 7-19
17A0100 7-3
17A0101 7-3
17A0102 7-15
17A0103 7-15
17A0104 7-7
17A0106 7-7
17A0107 7-7
17A0108 7-7
17A0109 7-7
17A0110 7-7
17A0111 7-7
17A0112 7-7
17A0116 7-9
17A0118 7-9
17A0119 7-9
17A0120 7-9, 7-19
17A0125 7-11
17A0126 7-11
17A0127 7-11
17A0128 7-11

4093/4094

17A0129 7-13
17A0130 7-13
17A0131 7-13
17A0132 7-5, 7-7, 7-15
17A0133 7-5, 7-7, 7-15
17A0134 7-15
17A0135 7-15
17A0136 7-7, 7-17
17A0137 7-17
17A0138 7-3, 7-5, 7-7, 7-11, 7-13
17A0139 7-11
17A0140 7-11
17A0493 7-5
17A0748 7-5
7349594 7-3